

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please cancel claims 1 to 7, 12 to 19 and 29 without prejudice. Please add new claim 31. Please amend the claims as follows:

1. - 7. (Canceled).

8. (Original) An anti-human CD40 antibody or a functional fragment thereof, wherein the antibody or a functional fragment thereof inhibits CD40L (1 μ g/ml) mediated tonsillar B cell proliferation in vitro, wherein the inhibitory efficiency leads to about 50 to 95% or greater reduction in B cell proliferation when the concentration of the antibody is in the range of 0.01 μ g/ml to 10 μ g/ml.

9. (Original) An anti-human CD40 antibody or a functional fragment thereof, wherein the antibody or a functional fragment thereof inhibits CD40L (1 μ g/ml) mediated tonsillar B cell proliferation in vitro, wherein the inhibitory efficiency leads to about a 85 to 95% or greater reduction in B cell proliferation when the concentration of the antibody is in the range of 0.1 μ g/ml to 10 μ g/ml.

10. (Original) An anti-human CD40 antibody or a functional fragment thereof, wherein the antibody or a functional fragment thereof inhibits CD40L (1 μ g/ml) mediated tonsillar B cell proliferation in vitro, wherein the inhibitory efficiency leads to about 80 to 95% or greater reduction in B cell proliferation when the concentration of the antibody is in the range of 0.01 μ g/ml to 10 μ g/ml.

11. (Original) An anti-human CD40 antibody or a functional fragment thereof, wherein the antibody or a functional fragment thereof inhibits CD40L (1 μ g/ml) mediated tonsillar B cell proliferation in vitro, wherein the inhibitory efficiency leads to about a 95% or greater reduction in B cell proliferation when the concentration of the antibody is in the range of 0.1 μ g/ml to 10 μ g/ml.

12. -19. (Canceled).

20. (Currently Amended) The anti-human CD40 antibody or a functional fragment thereof of claims ~~1 through 19~~ 8 through 11 wherein the heavy chain variable region and the light chain variable region of the antibody are the product of a human-derived antibody gene.

21. (Currently Amended) A pharmaceutical composition comprising at least one anti-human CD40 antibody or a functional fragment thereof selected from claims ~~1 through 20~~ 8 through 11 and 20.
22. (Withdrawn) An isolated DNA molecule encoding the heavy chain variable amino acid sequence of SEQ ID 16.
23. (Withdrawn) The isolated DNA molecule of claim 16, wherein the DNA sequence comprises SEQ ID 14.
24. (Withdrawn) An isolated DNA molecule encoding the light chain variable amino acid sequence of SEQ ID 17.
25. (Withdrawn) The isolated DNA molecule of claim 16, wherein the DNA sequence comprises SEQ ID 15.
26. (Withdrawn) An isolated DNA molecule encoding the heavy chain variable amino acid sequence of the antibody produced by the hybridoma F1-102, F5-77, F5-152, F2-103, F5-157, 72, or F4-465.
27. (Withdrawn) An isolated DNA molecule encoding the light chain variable amino acid sequence of the antibody produced by the hybridoma F1-102, F5-77, F5-152, F2-103, F5-157, 72, or F4-465.
28. (Withdrawn) An isolated DNA molecule wherein the DNA sequence comprises SEQ ID 10, SEQ ID 11, SEQ ID 12, SEQ ID 13, SEQ ID 14 or SEQ ID 15.

Claim 29 (Canceled)

30. (Withdrawn) A host cell containing the nucleic acid selected from claims 22 through 28.
31. (New) The anti-human CD40 antibody or functional fragment of any of claims 8 through 11, wherein the antibody or the functional fragment is modified to include one or more amino acid substitutions or additions, provided that the modified antibody or functional fragment retains substantially the same binding specificity of the anti-human CD40 antibody or functional fragment of any of claims 8 through 11.